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ABSTRACT

In an effort to determine the economic impact of Miami-Dade Community College (M-DCC) on Dade County, a study was conducted of the economic benefits of educational opportunities for human development of Dade County residents; the increase in business due to direct expenditures by the college, employees, and students; and "second round" expenditures consisting of expenditures for goods and services by businesses patronized by M-DCC, its staff, and students. Results of the study included the following: (1) for the 1989-90 fiscal year, M-DCC employed 2,783 full-time salaried professional and administrative staff, the full-time equivalent of 493 part-time instructional staff, and the full-time equivalent of 2,061 part-time hourly staff for a total of 5,337 full-time jobs for local residents; (2) expenditures made by M-DCC within Dade County create approximately 14,815 jobs indirectly, for a total of over 20,000 jobs created by the presence of M-DCC; (3) the education provided to Dade County residents by M-DCC results in an annual increase in income for Dade County residents of over $36.5 million dollars; (4) assuming that 50% of M-DCC expenditures are to county businesses and that 85% of M-DCC employees reside in Dade county, expenditures made by the college include $79.9 million in personnel expenditures, $36.3 in college expenditures, and $95.3 million in non-local student expenditures, for a total of $211.6 million in business volume; (5) business volume stimulated by "second round" spending of direct expenditures is estimated to be at $264.5 million; and (6) the total economic impact of M-DCC for fiscal year 1989-90 is estimated at $512.7 million. Detailed data tables are included. (PAA)

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ECONOMIC IMPACT OF MIAMI-DADE COMMUNITY COLLEGE ON DADE COUNTY

Research Report No. 91-10R

October 1991

Miami-Dade Community College
District Administration

Institutional Research

JC 920 033

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Miami-Dade Community College

ECONOMIC IMPACT OF MIAMI-DADE COMMUNITY COLLEGE ON DADE COUNTY

Research Report No. 91-10R

October 1991

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ECONOMIC IMPACT OF MIAMI-DADE COMMUNITY COLLEGE ON DADE COUNTY

EXECUTIVE SUMMARY

Miami-Dade Community College (M-DCC) was founded in 1960 and since then has grown to be a significant factor in the Dade County economic environment. The direct positive economic impact M-DCC exerts throughout the County can be felt in several ways. These include the jobs provided by the College for Dade County residents, the economic benefits of educational opportunities for human development of Dade County residents, and the increase in business due to direct expenditures by the College as well as those of employees and students. These college related expenditures also have an impact created by "second round" expenditures. This occurs when goods and services are purchased from Dade County businesses, who in turn make purchases from other Dade County businesses either through direct expenditures or through employees salaries. In order to provide estimates of these different effects, a study was conducted using standard methodologies and data available through the College's files. It should be noted that these standard methodologies produce a conservative estimate of a $512.7 million annual impact of M-DCC on the Dade County economy. The conservative nature of this estimate is due to the focus being on external funds drawn into Dade County due to the College's presence and excludes any contribution based on funds which originate inside of Dade County, such as revenues from local taxes and Dade County residents share of state taxes as well as fees and tuition paid by Florida residents. If funds originating internally would have been included, the annual impact would have been estimated at $611.8 million, or $99.1 million above the $512.7 million impact derived from the more conservative method.

One measure of the positive impact Miami-Dade has on the Dade County economy is the number of persons employed by the College. For the 1989-90 fiscal year, Miami-Dade employed 2,783 full-time salaried professional and administrative staff, the full-time equivalent of 493 part-time instructional staff, and the full-time equivalent of 2,061 part-time hourly staff. Summing these means that M-DCC provides the equivalent of over 5,300 full-time jobs for local residents. According to the Beacon Council's 1991 Annual Business Profile, the jobs provided by M-DCC make it Dade County's fourth largest public sector employer and eleventh largest of all Dade County employers, public and private. In addition to the jobs created directly at the College, expenditures made by M-DCC within Dade County create approximately 14,800 jobs indirectly, for a total of over 20,000 jobs created by M-DCC's presence.

Another measure of the economic impact of M-DCC is that which is provided by the educational opportunities offered to Dade County residents. According to human development theory, education provides an increase in individual productivity which can be quantified in economic terms. Using U.S. Department of Commerce figures, it is estimated

that the education provided to Dade County residents by M-DCC results in an annual increase in income for Dade County residents of over $36.5 million dollars.

M-DCC also has a considerable impact on the Dade County economy through expenditures made directly by the College, and through employee and student expenditures. Assuming that only 50% of College expenditures are made from Dade County businesses and 85% of M-DCC employees reside in Dade County, and only including expenditures of students from outside Florida, it is estimated that over $211.6 million in business volume is created by M-DCC related expenditures originating from external funds. The business volume stimulated by a "second round" spending of these funds is estimated to be an additional $264.5 million.

A summary of M-DCC's economic contributions to the Dade County economy is:

Jobs Created		
Jobs Created Directly at M-DCC	5,337	
Jobs Created by College Related Expenditures	14,815	
Human Development Contribution		$ 36,522,594
College Related Expenditures		
Primary Impact		
Personnel Expenditures		$ 79,975,538
College Expenditures		$ 36,316,299
Non-local Student Expenditures		$ 95,352,000
Secondary Impact		$264,554,797
Total		$512,721,228

Significant economic impacts of M-DCC which are excluded from these estimates are the savings of funds by local businesses and institutions and the amount of funds which are prevented from leaving. Examining the options available for students, employees, and local businesses may help to put this into perspective.

M-DCC students would fall into three groups if this educational option were not available. Students in the first category are those which would leave Dade County to pursue their educational objectives. This would most likely be those who are directly out of high school and able financially and academically to attend a college elsewhere but currently stay in Dade with their parents to reduce the cost of education. Federal guidelines estimate $17,400 annually for a student living away from home. This would be money no longer available to the Dade County economy if the student left to attend college elsewhere. This

would actually be a small proportion of M-DCC students. Less than a third of M-DCC students are 20 years old or younger and most students who begin their academic pursuits at M-DCC are initially ineligible to enroll in a university. In passing, it should be noted that many of these students strengthen their skill sufficiently to earn an Associate in Arts degree at M-DCC and move on the State University System.

The second group of students would be those who would remain in Dade County but pursue educational objectives at another institution. This would consist largely of the group named above, but would also include more older, employed students attending M-DCC part-time. The difference in tuition between M-DCC and the alternatives (University of Miami, Florida International, Saint Thomas, etc.) as well as factors such as enrollment caps and entrance requirements would also limit this option for most students.

The majority of M-DCC students are those which would fall into the third category of not pursuing educational objectives. In these cases not only would the $36.5 million in earning power be lost to the local economy, but other ramifications can be identified, although not readily quantified. For instance, options available to local businesses would include choosing from a less educated labor pool, broadening their labor pool, and starting educational/training programs of their own. The first would limit the quality of employees available. This may be overcome to a degree by the second but would cost more in terms of advertising and offering incentives to move to the area. The third would also be more costly for businesses since in most cases it would be less expensive to add a program at an existing public educational institution (M-DCC) than to start a new one or use a private training institute.

The above can be illustrated by considering the Metro-Dade government a business and looking at the Academy for Fire Science and Institute for Criminal Justice. These programs train employees for Metro-Dade and in some cases out-of-district departments. In the out-of-district cases, funds are brought into Dade County through M-DCC and in the Metro-Dade cases, are paid through by local funds. If this training were not available, Dade County would lose the out-of-district funds and Metro-Dade would either have to have untrained employees, recruit trained employees from outside the local area, provide the training, or hire a private organization to provide the training. In either case, any additional costs would be passed on to local taxpayers.

Prepared by: Ron Vorp, Research Associate
Institutional Research

Date: December 6, 1991

RV:ab

Economic Impact of Miami-Dade Community College On Dade County

Introduction

Miami-Dade Community College (M-DCC) often receives wide acclaim for its reputation as an educational institution. A less well recognized aspect of the College's presence is its vast economic contribution to Dade County. For example, the Beacon Council (1991) ranks M-DCC as Dade County's fourth largest public sector employer and eleventh largest among all employers, public and private. M-DCC's Annual Financial Report (1991) shows over $220 million in expenditures which have a positive impact on the Dade County economy. This report is presented to provide more detail on the overall economic impact of Miami-Dade Community College on Dade County.

Several areas are addressed in this report in order to provide quantifiable measures of M-DCC's economic impact on Dade County. These include: the sources of Miami-Dade's revenues, the funds flowing into the Dade County economy due to M-DCC's presence, the secondary effects of these funds, the number of jobs created by M-DCC's presence, and one measure of the economic impact of providing an educational opportunity for Dade County residents. (One measure of a negative economic impact resulting from M-DCC's property tax exemption status is also provided).

This report is based primarily on a model developed by Caffrey and Isaacs (1971). Although many studies, including an earlier one from M-DCC (Davis, 1986), also draw on this basic model, assumptions and methodologies frequently differ significantly/ or the sources of data are not made explicit. Other studies measure economic impact using different regional boundaries such as the entire state (Weitzman, 1991) or measure the economic impact of several institutions within a region (Kansas City Regional Council for Higher Education, 1991). All of these factors tend to render comparisons meaningless. Several of these issues are addressed below in an attempt to provide a more well-defined basis for future studies of this type. Tables 1 through 11 provide detailed information for the exact Miami-Dade figures used in the application of this model.

A draft of this report was presented to an economist who graciously reviewed the methodology and results. The comments were greatly appreciated, particularly those concerned with the reduction of impact based on estimated sources of revenue. However, after considerable discussion, the decision was made to follow the recommendation of Elliott, Levin and Meisel (1988) that the study provide an estimate of the additional economic impact generated by the institution. It should be noted that without the reduction based on the sources of revenue, Miami-Dade Community College's total impact is estimated at $611.8 million, or $99.1 million above the $512.7 million impact derived from Elliot, Levin and Meisel's more conservative method.

Using the Elliott, Levin and Meisel model, several assumptions were made concerning the sources of revenues. To calculate the economic impact of expenditures, 85% of all college personnel were estimated to reside within Dade County and 50% of M-DCC's purchases were assumed to be from Dade County businesses. M-DCC financial aid guidelines were used to compute expenditures for students from outside of Florida.

Using the above assumptions and the conservative end of ranges given by the Caffrey and Isaacs model M-DCC was found to contribute over $500 million annually to the Dade County economy. The contribution is based on funds which M-DCC draws into Dade County from external sources. The components of this contribution are:

Primary Impact	
Personnel Expenditures	$ 79,975,538
College Expenditures	$ 36,316,299
Non-local Student Expenditures	$ 95,352,000
Secondary Impact	$264,554,797
Human Development	$ 36,522,594
Total	$512,721,228

Methodology and Results

The original Caffrey and Isaacs model focuses entirely upon institutional expenditures. The authors state "Amounts and sources of revenue are readily known". Others, such as the 1986 M-DCC study, discuss the sources of revenues, but use total expenditures when calculating impact. The present study follows a methodology suggested by Elliott, Levin and Meisel (1988), who state "the primary goal of all economic-impact analysis is to measure the *additional* economic impact caused by the institution above the level of economic activity that would have occurred in its absence" (p.23). In order to accomplish this goal, the authors recommend that the institution's expenditures be reduced in proportion to the funds which originate locally. Table 1 shows the sources of M-DCC's revenues from the Annual Financial Report and the percentages used to provide estimates of how much originated within Dade County. For example, it is assumed that the contributions from the local government were already a portion of the local economy and that if these were not allocated to M-DCC, they would have gone into another local project. Likewise, any revenue from endowments, gifts, etc. were assumed to originate locally. Some of the revenues were calculated as originating partially internal and partially external to Dade County. For example, data from M-DCC Community College Program Fund files show 111,078 (9%) of the 1990-91 credits were generated by students from outside of Florida. Because the tuition/matriculation fees for these students are higher than for residents, 22% of tuition/matriculation fees and 9% of other fees and sales (e.g. books) were calculated as originating externally (see Table 2). These percentages would actually be higher due to a portion of the remaining funds originating from within Florida, outside of Dade County. Also, of the $133 million from State revenues, 14% was determined to originate in Dade County. This is because the primary sources of the State funding are taxes and lottery sales. According to the Florida Statistical Abstract (1990), 14% of all Florida taxes are collected in Dade County and it is assumed that Dade County lottery sales are a comparable percentage. Calculation of a comparable figure for federal funds would have required the total of federal taxes collected and the percentage collected from Dade County. Since these figures were unavailable, the total federal support was counted as being brought in from outside.

The M-DCC Annual Financial Report lists expenditures under three categories: Personnel Costs, Current Expenses, and Capital Outlay (see Table 3). To estimate the amount of revenue which originated outside of Dade County, the total amount from Table 1 which was determined to originate internally (19% or $44 million) was subtracted proportionately from the three classes of expenditures. The amount subtracted from each of the three classes and the amount determined to originate externally is presented in Table 3.

The largest conduit for distribution of funds through M-DCC is through salaries paid to employees, which is in turn distributed through purchases made within Dade County. The $133 million in personnel expenses from the Annual Financial Report are the equivalent of M-DCC's employees wages and salaries before taxes. According to the above calculations, $26.2 million of the personnel funds originated from inside Dade County, leaving $106.9 million originating externally. According to the U.S. Department of Labor (1990), expenses for the metropolitan Miami area are equal to 88% of the wages and salaries before taxes. Therefore, for the $106.9 million M-DCC paid in personnel expenses from funds which originated outside Dade County, the recipients of these payments (M-DCC employees) paid $94.0 million in expenses. Also, as in the previous M-DCC study, it is estimated that 85% of these employees live in Dade County and that all purchases are made within the county. Although the latter is obviously not the case, it is assumed that any purchases made outside the county are balanced by those made within the county by non-residents. Taking all calculations into consideration, it is estimated that $79.9 million worth of purchases are made in Dade County by funds flowing in from outside through wages and salaries paid to M-DCC personnel (Table 4).

In addition to purchases made by M-DCC employees, the College itself also makes a significant impact through direct purchases. Figures from the 1991 Annual Financial Report Capital Outlay and Current Expense expenditures minus the portion calculated to have originated within Dade County leaves over $72.6 million of expenditures on goods and services made from funds which originated externally. As with the previous M-DCC study, it is estimated that 50% of these purchases were made from Dade County firms. Using

these figures, an additional $36.3 million of external funds were brought into Dade County as a result of direct M-DCC purchases (Table 5).

Another source of revenue which M-DCC attracts to Dade County is students from outside of Florida. Florida residents outside of Dade County were not included as non-residents because this would pick up students who may commute from Broward or Monroe Counties and have relatively few expenditures within Dade County. Using this criterion, M-DCC's annual Student Profile (1990) shows 5,480 students from outside of Florida attending M-DCC. Financial aid guidelines (1990) estimate living expenses for a student away from home at $17,400 per year, excluding tuition and fees. This yields a conservative estimate of over $95 million drawn into Dade County's economy because of M-DCC (Table 6).

Summing the personnel, college, and student expenditures calculated in Tables 4 through 6 show over $211 million in funds added directly to the Dade County economy through M-DCC's presence.

One factor brought into the Caffrey and Isaacs model for direct expenditures but not quantifiable for the purposes of this study are funds brought in by visitors. This would include visitors to students and employees, college-related events such as seminars and conferences and events held at or by the college and open to the public. Given Miami's location and tourist related activities it is easy to imagine a substantial number of visitors to employees and students. Figures provided by the Office of Business Affairs show 9,849 tickets to college events such as plays, sports events, etc. for 1990-91. However, this figure represents tickets sold and complimentary tickets and does not include tickets to events not reported to Business Affairs. It also does not include events with outside sponsors such as Bookfair or Paella, for which latest attendance estimates are 500,000 and 10,000, respectively. However, it should be kept in mind that these events do draw visitors who in turn provide business for other businesses in the area. There is no method to determine which visitors are from outside Dade and are bringing new funds in or are using funds which otherwise would have been used in other Dade County areas.

The $211 million direct contribution of college related expenditures also has secondary effects which can be calculated according to the multiplier concept. This concept relates to the local respending of funds which originate externally minus the portion siphoned off in the form of taxes, savings, or non-local purchases. A portion of these are again respent locally and so on. The Caffrey and Isaacs model breaks this down into three separate components and provides a range for each:

1) Purchases by local business from other local businesses in order to meet the original needs of the college. For example, if the college purchases office supplies from a local manufacturer, that manufacturer purchases a portion of the materials needed to produce those supplies from other local businesses. Suggested multiplier range .15-.30 of direct expenditures.

2) Purchases by local businesses from other local businesses to meet the demands of the college personnel purchases. Essentially the same as (1) but for household purchases. Suggested multiplier range .50-.66 of direct expenditures.

3) Income accruing to local residents from the wages and salaries paid by the local businesses from which the purchases are made. Suggested multiplier range .60-.80 of direct expenditures.

Table 7 shows the calculations for the above at both ends of the ranges given. The overall impact of the direct and secondary expenditures was found to be an increase in business volume ranging from $476 million to $584 million with an overall multiplier effect of 2.25 to 2.76. This overall multiplier effect is in line with other studies (see Elliott, Levin & Meisel, 1988; Kansas City Regional Council for Higher Education, 1991). Caffrey and Isaacs state that the multipliers are based on a geographic area of approximately 50,000 persons (including students). When the area under study is larger and more economically diverse the upper end of the range would be more applicable, and when the area is smaller and less diverse the lower end should be used. Dade County is more like the former in reference to the base population, suggesting the actual figure would be nearer to the upper end of the range. In keeping with the conservative nature of this study, however, the lower end of the multiplier range is used to estimate the total economic impact.

Another measure of economic impact presented in this study is the increase in earning power for persons who attend M-DCC. This measure is based on the human development model (Littlefield, 1982) which asserts that education provides an increase in an individual's productivity which can be quantified in monetary terms. In order to be included as additional funds brought into the area, it must be assumed these funds would not have been introduced into the local economy if the educational institution had not been present. Why this assumption has been made will be addressed under the limitations inherent in the present type of study. For the purposes of this study, the monetary value of a community college level education was provided by a U.S. Department of Commerce report (1990) which shows monthly income based on educational background. The increased annual income above those with a high school degree only was calculated for those with a) an Associate degree b) a Vocational Certificate and c) some college but no degree. Data from M-DCC's 1989-90 Follow-up Report were then used to determine the number of students who left M-DCC during that year in each group. These figures were then used to calculate the total increase in income due to the education received at M-DCC. Again using the Department of Labor figure of expenditures being 88% of income, $36.5 million was estimated as being introduced into the Dade County Economy due to the education provided by M-DCC (see Table 8). This would again be a conservative estimate because:

1) Those who left M-DCC with "some college, but no degree" had at least 15 credits beyond college preparatory and English-as-a-Second Language requirements, placing them at the upper end of that category.

2) The U.S. Department of Commerce data were collected in 1987, meaning inflation would magnify the increase above those in the high school only group.

Table 9 shows a summary of the increase in Dade County business volume attributable to outside funds brought in due to M-DCC through 1) employee expenditures, 2) M-DCC expenditures, 3) expenditures by students who come to attend M-DCC, 4) secondary effects of these expenditures, and 5) the increase in earning power due to the education received at M-DCC. The overall increase is estimated in the range of $512 million to $620 million, with the upper end of the range probably closer to the actual impact.

Another measure of the economic impact of M-DCC's presence is the number of jobs created. Miami-Dade employs over 2,700 full-time personnel and another 4,100 part-time clerical workers. Assuming that these clerical workers are half-time (in fact, most work a 30 hour week) means that this is the equivalent of over 2,000 full-time positions. In addition, the full-time equivalent of another 500 positions are created due to part-time instruction annually. Summing all of these means that the equivalent of over 5,300 full-time jobs are created at M-DCC (Table 10).

Caffrey and Isaacs also suggest a calculation of the number of jobs created indirectly through college related expenditures. They estimate that each dollar of direct college related expenditures results in .00007 jobs. Using this estimate and the $211 million direct college related expenditures means that approximately 14,815 jobs are created indirectly through M-DCC related expenditures. This, together with the jobs created directly at the College, results in approximately 20,152 jobs created in Dade County as a result of M-DCC (Table 10).

In focusing upon Dade County business volume stimulated by external funds, significant economic impacts of M-DCC which are overlooked are the savings of funds by local businesses and institutions and the amount of funds which are prevented from leaving. Examining the options available for students, employees and local businesses may help to put this into perspective.

M-DCC students would fall into three groups if this educational option was not available. These are:

1) Those who would leave Dade County to pursue educational objectives.

2) Those who would remain in Dade County and pursue educational objectives at another institution.

3) Those who would remain in Dade and not pursue any educational objectives.

Students choosing to leave Dade County would most likely be those who are directly out of high school and able financially and academically to attend a college elsewhere but currently staying in Dade with their parents to reduce the cost of education. This group may be thought of as contributing relatively little economically, but if this group was to leave, it would also either reduce the discretionary income the parents have available to spend locally, increase the debts these students have when they return to Dade, and therefore, decrease their discretionary income, or more likely, both. Recall that the federal guidelines estimate $17,400 annually for a student living away from home. This would be money no longer available to the Dade County economy if the student left to attend college elsewhere. This would actually be a small proportion of M-DCC students. According to the Annual Student Profile (1990), less than a third (31%) of M-DCC students are 20 years old or younger, and, traditionally, approximately two-thirds of M-DCC first-time-in-college students are considered academically underprepared by current standards.

The second group of students would be those who would remain in Dade County but pursue educational objectives at another institution. This would consist largely of the group named above, but would also include more older, employed students attending M-DCC part-time. The funds made unavailable to the Dade County economy in these cases would be minimal. The difference in tuition between M-DCC and the alternatives (University of Miami, Florida International, Saint Thomas, etc.) would be lost to local businesses but would remain in Dade County. However, the numbers in this group would also be limited by factors such as enrollment caps, tuition costs and entrance requirements.

The majority of M-DCC students appear to be those which would fall into the third category of not pursuing educational objectives. In these cases not only would the $36.5 million in earning power be lost to the local economy, but other ramifications can be identified, although not readily quantified. For instance, options available to local businesses would include choosing from a less educated labor pool, broadening their labor pool, and starting educational/training programs of their own. The first would limit the quality of employees available. This may be overcome to a degree by the second but would cost more in terms of advertising and offering incentives to move to the area. The third would also be

more costly for businesses since in most cases it would be less expensive to add a program at an existing public educational institution (M-DCC) than to start a new one or use a private training institute. The degree to which these funds would be lost to the Dade County economy would depend on who received the additional costs paid out by the businesses. In some cases, as pointed out by Caffrey and Isaacs, M-DCC providing this function can even be viewed as denying entrepreneurial opportunities to individuals within the community.

The above can be illustrated by considering the Metro-Dade government a business and looking at the Academy for Fire Science and Institute for Criminal Justice. These programs train employees for Metro-Dade and in some cases out-of-district departments. In the out-of-district cases, funds are brought into Dade County through M-DCC and in the Metro-Dade cases, are paid through by local funds. If this training were not available, Dade County would lose the out-of-district funds and Metro-Dade would either have to have untrained employees, recruit trained employees from outside the local area, provide the training, or hire a private organization to provide the training. In either case, any additional costs would be passed on to local taxpayers although the funds may remain in Dade County.

In addition to the impact of the educational opportunities being denied Dade County residents, the loss of employment opportunities created by M-DCC funding would have additional economic repercussions. Residents would fall into categories similar to the students: those that would seek employment outside of Dade County, those that would seek employment with other businesses within Dade County, and those that would not seek other employment. In all cases, funds would be removed from the Dade County economy because in the second the individual would have to replace somebody else, whose funds would then be lost. In addition, persons who remain in the area would contribute to problems traditionally associated with unemployment, such as unemployment compensation, crime, public assistance and the burden on Miami's sole public hospital, Jackson Memorial.

One negative impact M-DCC can be said to have on the Dade County economy is through the amount of property taxes foregone on M-DCC properties due to the College's tax exempt status. This exact figure is difficult to derive due to several factors. First, the

only property values available were from Risk Management and were derived for insurance purposes. These figures only include the value of the buildings on the property and not the property itself. Since M-DCC's land was purchased as long as 25 years ago and has not been reassessed, the current value of that land is nearly impossible to determine. Furthermore, opportunities seldom arise to determine the value of buildings such as classroom buildings or gymnasiums in an open market. In spite of these shortcomings, a rough estimate of this impact was made using millage rates published by the Beacon Council (1991) for the different campus areas applied to the appropriate property values obtained from Risk Management. The total real estate taxes foregone due to M-DCC's tax exempt status are approximately $6.5 million. Calculations are shown in Table 11.

Summary

The current study indicates that M-DCC contributes over $512 million annually to the Dade County economy. This is a conservative estimate which excludes any contribution based on funds which originate inside of Dade County, such as revenues from local taxes and Dade County residents share of state taxes. Fees and tuition paid by Florida residents are also excluded, as well as the contribution made by providing Dade County residents a local educational opportunity which prevents funds from being drawn from the area. Sources of M-DCC funds which do contribute to this impact are fees and tuition paid by students and federal funds and state revenue originating outside of Dade County. Additional contributions are from local expenditures by students from outside of Florida and from educational opportunities provided for local residents. One negative impact presented is $6.5 million dollars in property taxes foregone due to M-DCC's tax exempt status.

Table 1

Miami-Dade Community College
Estimated Sources of Revenues

Source*	Revenues*	Percent Estimated Originating in Dade
Matriculation & Tuition	$ 32,833,040	78%
Student Fees	$ 10,502,325	91%
Sales and Services Department	$ 12,099,728	91%
State Support	$133,041,586	14%
Federal Support	$ 25,517,428	0%
Local Government	$ 927,000	100%
Other Revenue (Endowments, Gifts, etc.)	$ 9,039,318	100%
Non-Revenue Receipts	$ 2,250,728	100%
Total	$226,211,153	19%

*M-DCC Annual Financial Report 1990-1991.

Table 2

Miami-Dade Community College
1990-91 Fees From Students From Outside of Florida

Total Annual Credits* 1990-91 Report Year	1,196,846	
Total Matriculation/Tuition Fees**	$32,833,040	
Credits Generated by Students From Outside of Florida*	111,078	
Matriculation/Tuition Fees for Students From Outside of Florida***	$ x 65.75	(per credit)
Total Matriculation/Tuition Fees From Students From Outside of Florida	$ 7,303,379	(22%)
Total "Other" Fees**	$10,502,325	
Percent of Credits Generated by Students From Outside of Florida*	x 9%	
Total "Other" Fees From Students From Outside of Florida	$ 945,209	
Total Fees From Students From Outside of Florida	$ 8,248,588	

*M-DCC Community College Program Fund (CCPF) files.
**M-DCC Annual Financial Report 1990-1991.
***M-DCC 1990-91 Catalog.

Table 3

Miami-Dade Community College
Estimated Sources of Expenditures

	Total Expenditures*	Percent	Annual Expenditures Estimated to Originate in Dade County	Annual Expenditures Estimated to Originate Externally
Personnel Costs	$133,207,154	59.6	$26,287,986 (59.6%)	$106,919,168
Current Expenses	$ 61,629,904	27.6	$12,173,631 (27.6%)	$ 49,456,273
Capital Outlay	$ 28,822,068	12.8	$ 5,645,742 (12.8%)	$ 23,176,326
Total Expenditures	$223,659,126	100.0	$44,107,359	$179,551,767

*M-DCC Annual Financial Report 1990-91

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Table 4

Estimated Miami-Dade Community College Employee Expenditures Originating Outside of Dade County

College Personnel Expenditures Originating Outside Dade County (employee income before taxes)	$106,919,168
	x 88%*
Employee Expenditures	$ 94,088,868
	x 85%
Dade County Residents Expenditures	$ 79,975,538

*U.S. Department of Labor Consumer Expenditures Survey, 1987 (1990)

Table 5

Estimated Miami-Dade Community College Expenditures Originating Outside of Dade County

M-DCC Expenditures Originating Outside of Dade County	$72,632,599
	x 50%
Estimated Dade County Business Receipts	$36,316,299

Table 6

Estimated Annual Expenditures by Students From Outside of Florida

Transportation*	$ 3,396
Lunches*	$ 1,235
Room and Board*	$ 10,488
Miscellaneous*	$ 2,281
Total	$ 17,400
Total Annual Students From Outside of Florida**	x 5,480
Total Annual Dade County Expenditures by Students From Outside of Florida	$95,352,000

*M-DCC Technical Manual of Procedures
**M-DCC Annual Student Profile - 1990

Table 7

Miami-Dade Community College
Estimated Direct and Secondary Contributions
To Dade County Economy

	Low	High
Direct Input to Dade County Economy	$211,643,837	$211,643,837
Purchases by Local* Business to Support College Purchases	$211,643,837 x .15 $ 31,746,576	$211,643,837 x .30 $ 63,493,151
Purchases by Local* Business to Support Employee Purchases	$211,643,837 x .50 $105,821,919	$211,643,837 x .66 $139,684,933
Income for Other* Dade County Residents	$211,643,837 x .60 $126,986,302	$211,643,837 x .80 $169,315,070
Total Business Volume From M-DCC Related Expenditures	$476,198,634	$584,136,991
Multiplier (Total Business Volume + Direct Input)	2.25	2.76

*Caffrey & Isaacs (1971), Estimating the Impact of a College or University on the Local Economy.

Table 8

Estimated Annual Increase in Income of Dade County Residents
by Educational Level Provided by
Miami-Dade Community College

Educational Level	Annual Income
High School*	$ 13,620
Associates Degree*	$ 19,560
Increase	$ 5,940
Associate Degrees Awarded**	x 5,033
Annual Income Increase	$29,896,020
Vocational*	$ 17,004
Increase	$ 3,384
Vocational Certificates Awarded**	x 6
Annual Income Increase	$ 20,304
Some College, No Degree*	$ 15,396
Increase	$ 2,376
Leavers**	x 6,524
Annual Income Increase	$11,586,624
Total Annual Income Increase	$41,502,948
Expenditures***	x 88%
Total Annual Increase in Dade County Expenditures	$36,522,594

*U.S. Bureau of The Census (1990) What's it Worth? "Educational Background and Economic Status: Spring 1987".
**M-DCC Placement and Follow-Up Report, AA-2 Series (1991).
***U.S. Department of Labor Consumer Expenditures Survey, 1987 (1990)

Table 9

Total Estimated Annual Increase in Dade County Business Volume
Due to Miami-Dade Community College
Related Expenditures

Employee Expenditures	$ 79,975,538	
M-DCC Expenditures	$ 36,316,299	
Non-Florida Student Expenditures	$ 95,352,000	
Secondary Effects	$264,554,797 to	$327,493,154
Value of Education	$ 36,522,594	
Grand Total	$512,721,228	$620,659,585

Table 10

Jobs Created at Miami-Dade Community College and Estimated Jobs Created by Miami-Dade Community College Related Annual Expenditures

CAS Payroll Files	A1	378
88-3, 89-1, 89-2	A2	390
	C2	1,083
Full-Time Jobs		2,783
Part Time Clerical	C1	4,122 /2 for FTE
FTE Clerical		2,061
Part time Points (FMS01)	88-3	4,922
	88-4	3,326
	89-1	38,707
	89-2	35,844
Total Annual Points		82,799 / 168 Annual PTS Per FTE
FTE From Part Time and Overload		493
Jobs Created Directly at Miami-Dade		5,337
Total Miami-Dade Related Annual Direct Expenditures		$211,643,837 x .00007* (Jobs Created* per Dollar)
Jobs Created by Miami-Dade Related Annual Direct Expenditures		14,815
Estimated Total Annual Jobs Created by Miami Dade's Presence		20,152

*Caffrey & Isaacs (1971), Estimating The Impact of a College or University on the Local Economy.
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Table 11

Estimated Value of Property Tax Exemption
Miami-Dade Community College

Property	Value*	Millage**	Property Tax
North Campus	$81,307,998	29.70	$2,414,848
South Campus	$81,322,948	24.02	$1,953,377
Wolfson Campus	$49,412,721	31.72	$1,567,372
Medical Center Campus	$16,205,286	31.72	$ 514,032
Homestead Campus	$ 2,329,254	29.69	$ 69,156
College Residence	$ 489,386	23.75	$ 11,623
Hialeah Center	$ 1,655,730	25.30	$ 41,890
Total Estimated Taxes Foregone			$6,572,298

*M-DCC Risk Management Consortium (1991)
**Beacon Council (1991): Miami Business Profile, 1991 Annual

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